

CLAIMS

We claim:

- 1 1. A data processing system, comprising
 - 2 a text-based host including a workstation server;
 - 3 a workstation including a graphics capable client;
 - 4 a graphics application on said host;
 - 5 said client being operable for negotiating a connection
 - 6 with said host on a first port;
 - 7
 - 8 said client being further operable for informing said
 - 9 workstation server that said workstation is graphics
 - 10 enabled and that said graphics capable client is
 - 11 waiting on a second port;
 - 12 said workstation server being operable for establishing

13 a connection to said second port for communication
14 between said graphics application and said graphics
15 client.

1 2. The data processing system of claim 1, said workstation
2 further including a graphical user interface for interfacing
3 between a user and said graphics capable client on behalf of
4 said graphics application.

1 3. The data processing system of claim 2, said client
2 being a Telnet-based client, said graphical application
3 being a Java graphical application, and further comprising:

4 a Java Virtual Machine for executing said graphics
5 application;

6 a windowing toolkit responsive to IP address and port
7 attributes from said Telnet-based client for
8 establishing at least two independent connections to
9 the IP address of said workstation, at least one of
10 said independent connections being from said Java
11 Virtual Machine to said graphics enabled client.

1 4. The data processing system of claim 3, further
2 comprising a Java Virtual Machine and virtual device support
3 for a plurality of client and hardware configurations,
4 thereby providing application platform independence for a
5 plurality of workstation architectures.

1 5. The data processing system of claim 4, further
2 comprising:

3 a plurality of graphical applications for performing
4 language and work management functions;

5 said Java Virtual Machine and virtual device support
6 providing language and work management functions
7 simultaneously for a plurality of workstation clients.

8 6. The data processing system of claim 5, said text-based
9 host providing a centralized store and support for a
10 plurality of text-based applications and graphics-based
11 applications.

1 7. The data processing system of claim 6, said
2 applications including applications for executing backup and
3 recovery processes.

1 8. The data processing system of claim 6, said text-based
2 host further providing for centralized upgrading of said
3 applications applicable to all workstations without
4 requiring routine upgrading of hardware or software of said
5 workstations.

1 9. The data processing system of claim 6, said text-based
2 host providing a single source for application service
3 providers, including consulting, leasing, and marketing text
4 based and graphical applications.

1 10. The data processing system of claim 2, said text-based
2 host providing support for thin clients having graphical
3 capability.

1 11. A data processing system, comprising:

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a text based host system;

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a Java virtual machine on said text based host system

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for executing both text based and graphical

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applications;

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a workstation server on said host system for connecting

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said host system to a plurality of ports at a client

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workstation, at least one of said ports interfacing a

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graphical client and another of said ports interfacing

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a Telnet-based client.

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12. System for executing multimedia applications on a text

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based host for input/output with respect to a multimedia

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enabled workstation, comprising:

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a library of multimedia enabled applications;

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a Telnet-based client for negotiating a connection with

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said host on a first enabled port and informing said

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host that said workstation is multimedia enabled and a

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multimedia enabled client at said workstation is

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9      listening on at least one second port for multimedia
10     application data;

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11 said host selectively for establishing a multimedia
12 connection from a virtual machine executing a selected
13 application to said second port on the client for
14 presentation of a multimedia application interface at
15 said multimedia enabled client.

13. System for executing multimedia applications on a text based host for input/output with respect to a multimedia enabled workstation, comprising:

a server for negotiating a connection with a
Telnet-based client at said workstation on a first
enabled port and receiving from said Telnet-based
client indicia specifying that said workstation is
multimedia enabled and a multimedia enabled client at
said workstation is listening on at least one second
port for multimedia application data; and

12 said host selectively for establishing a multimedia
13 connection from a virtual machine executing a selected
14 application to said second port at said workstation for
15 presentation of a multimedia application interface at
16 said multimedia enabled client.

1 14. Method for executing multimedia applications on a text
2 based host for input/output with respect to a multimedia
3 enabled workstation, comprising the steps of:

4 negotiating a connection with a Telnet-based client at
5 said workstation on a first enabled port;

6 receiving from said Telnet-based client indicia
7 specifying that said workstation is multimedia enabled
8 and a multimedia enabled client at said workstation is
9 listening on at least one second port for multimedia
10 application data; and

11 selectively establishing a multimedia connection from a
12 virtual machine executing a selected application to
13 said second port at said workstation for presentation
14 of a multimedia application interface at said

15 multimedia enabled client.

1 15. A program storage device readable by a machine,
2 tangibly embodying a program of instructions executable by a
3 machine to perform method steps executing multimedia
4 applications on a text based host for input/output with
5 respect to a multimedia enabled workstation, said method
6 steps comprising:

7 negotiating a connection with a Telnet-based client at
8 said workstation on a first enabled port;

9 receiving from said Telnet-based client indicia
10 specifying that said workstation is multimedia enabled
11 and a multimedia enabled client at said workstation is
12 listening on at least one second port for multimedia
13 application data; and

14 selectively establishing a multimedia connection from a
15 virtual machine executing a selected application to
16 said second port at said workstation for presentation
17 of a multimedia application interface at said
18 multimedia enabled client.

1 16. A computer program for executing the steps comprising:
2 negotiating a connection with a Telnet-based client at
3 said workstation on a first enabled port;

4 receiving from said Telnet-based client indicia
5 specifying that said workstation is multimedia enabled
6 and a multimedia enabled client at said workstation is
7 listening on at least one second port for multimedia
8 application data; and

9 selectively establishing a multimedia connection from a
10 virtual machine executing a selected application to
11 said second port at said workstation for presentation
12 of a multimedia application interface at said
13 multimedia enabled client.